(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 10 January 2002 (10.01.2002)

PCT

(10) International Publication Number WO 02/02128 A3

- (51) International Patent Classification⁷: A61K 33/00, 31/05, 31/155, 31/14, 33/30, 33/34, 45/06, A61P 1/02, A61K 7/16, 7/22
- (21) International Application Number: PCT/US01/20516
- (22) International Filing Date: 28 June 2001 (28.06.2001)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 09/607,240

30 June 2000 (30.06.2000) US

- (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).
- (72) Inventors: DOYLE, Matthew, Joseph; 451 Deanview Drive, Cincinnati, OH 45224 (US). HUNTER-RINDERLE, Stephen, Joseph; 6721 Man O'War Lane, Mason, OH 45040 (US). SINGER, Robert, Ernest, Jr.; 3 Kingsmont Court, Fairfield, OH 45014 (US).
- (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).

- (81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 25 April 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ORAL COMPOSITIONS COMPRISING ANTIMICROBIAL AGENTS

(57) Abstract: The present invention relates to promoting whole body health in humans and animals by using topical oral compositions comprising a safe and effective amount of an antimicrobial agent in admixture with a pharmaceutically acceptable carrier, said compositions being effective in controlling bacterial-mediated diseases and conditions present in the oral cavity and in inhibiting the spread into the bloodstream of pathogenic oral bacteria, associated bacterial toxins and endotoxins, and resultant inflammatory cytokines and mediators.

EV 404053044 US

Atty. Docket No.: 2664-000003US Serial No.: 10/775,706

Applicant: Hoic et al., Reference 9 of 9



inter onal Application No PCT/US 01/20516

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{A61K} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

ENTS CONSIDERED TO BE RELEVANT	
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to daim No.
US 5 294 433 A (SINGER ROBERT E ET AL) 15 March 1994 (1994-03-15) claims 1-13; examples 7,8	1-6
EP 0 430 474 A (PROCTER & GAMBLE) 5 June 1991 (1991-06-05) claims 1-7; example 7	1,2,5,6
WO 97 47292 A (PROCTER & GAMBLE) 18 December 1997 (1997-12-18) page 6, line 15 - line 33; claims 1-9; examples 7,8	1-6
US 4 599 228 A (P.A.LADANYI) 8 July 1986 (1986-07-08) claims 1-12	1,2,5,6
	US 5 294 433 A (SINGER ROBERT E ET AL) 15 March 1994 (1994-03-15) claims 1-13; examples 7,8 EP 0 430 474 A (PROCTER & GAMBLE) 5 June 1991 (1991-06-05) claims 1-7; example 7 WO 97 47292 A (PROCTER & GAMBLE) 18 December 1997 (1997-12-18) page 6, line 15 - line 33; claims 1-9; examples 7,8 US 4 599 228 A (P.A.LADANYI) 8 July 1986 (1986-07-08) claims 1-12

X Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.				
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filing date but later than the priority date claimed	 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone 'Y' document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. '&' document member of the same patent family 				
Date of the actual completion of the international search	Date of mailing of the international search report				
12 February 2002	21/02/2002				
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Authorized officer Stienon, P				

4

Inte onal Application No PCT/US 01/20516

		PC1/US 01/	20310
C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
Α	WO OO 32159 A (PROCTER & GAMBLE) 8 June 2000 (2000-06-08) claims 1-10; example 1		
A	WO 00 32160 A (PROCTER & GAMBLE) 8 June 2000 (2000-06-08) claims 1-10; example 2		`
A	GB 2 317 339 A (PROCTER & GAMBLE) 25 March 1998 (1998-03-25) abstract; claims 1-11		
		:	

information on patent family members

Inte: onal Application No
PCT/US 01/20516

			_	101703	
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5294433	A	15-03-1994	AU CN MX TR	3930493 A 1082400 A 9302203 A1 26802 A	18-11-1993 23-02-1994 29-04-1994 08-08-1994
			WO US	9320815 A1 5364616 A	28-10-1993 15-11-1994
EP 0430474	Α	05-06-1991	US AT AU	5198220 A 118170 T 648278 B2	30-03-1993 15-02-1995 21-04-1994
			ΑU	6667690 A 2029046 A1	23-05-1991 18-05-1991
			CA DE	69016755 D1	23-03-1995
			DE	69016755 T2	21-09-1995
			DK EP	430474 T3 0430474 A1	03-04-1995 05-06-1991
			ES	2067696 T3	01-04-1995
			FΙ	905683 A ,B,	18-05-1991
			GR IE	3015027 T3 904147 A1	31-05-1995 22-05-1991
			JP	3051154 B2	12-06-2000
			JP	3271219 A	03-12-1991
			KR NZ	156917 B1 236113 A	16-11-1998 26-05-1993
			PT	95867 A ,B	30-09-1991
WO 9747292	Α	18-12-1997	AU BR	3306997 A 9709792 A	07-01-1998 10-08-1999
			CA	2257990 A1	18-12-1997
			CN	1221338 A	30-06-1999
			EP JP	0954294 A1 11513035 T	10-11-1999 09-11-1999
			WO	9747292 A1	18-12-1997
US 4599228	A	08-07-1986	AU AU	548560 B2 7015681 A	19-12-1985 26-11-1981
			CA	1177407 A1	06-11-1984
			CH	645268 A5	28-09-1984
			DE FR	3119746 A1 2482860 A1	04-03-1982 27-11-1981
			GB	2078109 A ,B	06-01-1982
			IT	1136620 B	03-09-1986 17-10-1995
			JP JP	1978057 C 6086380 B	02-11-1994
			JP	57056428 A	05-04-1982
			NL SE	8102369 A 8103152 A	16-12-1981 21-11-1981
WO 0032159	 A	 08-06-2000	AU	3103100 A	19-06-2000
MO 0035133	А	00 00 2000	BR	9915609 A	14-08-2001
			CN CZ	1328442 T 20011721 A3	26-12-2001 17-10-2001
			EP	1135099 A1	26-09-2001
			NO	20012625 A	29-05-2001
			WO	0032159 A1	08-06-2000
WO 0032160	Α	08-06-2000	US	6187295 B1	13-02-2001

' information on patent family members

Inte onal Application No PCT/US 01/20516				
PCT/US	01/20516			

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 0032160 A		<u> </u>	BR CN CZ EP NO WO	9915753 A 1328441 T 20011526 A3 1135098 A1 20012661 A 0032160 A1	04-09-2001 26-12-2001 17-10-2001 26-09-2001 30-05-2001 08-06-2000
GB 2317339	Α	25-03-1998	NONE		